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Medical, Anatomical, and Visual Transformations in the Japanese Woodblock Prints of the Edo and Meiji Periods (1603 - 1912)

Victoria Bennett

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Medical, Anatomical, and Visual Transformations in the Japanese Woodblock Prints of
the Edo and Meiji Periods (1603 - 1912)

By

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Abstract

“Medical, Anatomical, and Visual Transformations in the Japanese Woodblock Prints of the Edo and Meiji Periods” first presents one of Japan’s lesser known genres of woodblock print. The history of the Edo and Meiji periods is overviewed, providing a contextual backdrop for the prints that are highlighted within the catalogue. Images from three sections: Anatomy, Disease, and Medical Practice are catalogued, supplying the viewer with new visual analysis and translation of prints. Each of these sections of print demonstrate the transformation of Japanese printmaking, from the Edo period to the Meiji, that accompanies the rapid transformation of Japanese culture during these two time periods.

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Introduction

Japanese woodblock prints (*moku hanga*) arose in the Edo period (1603-1868) as an accessible art form utilizing indigenous artistic styles to appeal to the autochthonous consumer. Most commonly depicting subjects from popular culture, woodblock prints combine informative text with vivid images to engage potential buyers. The combination of medical imagery and text with popular subjects, such as *Kabuki* actors and beautiful women, is a prime example of this practice. For instance, several disease outbreaks, including measles and cholera, led to artists referencing diseases in their prints. By depicting famous *Kabuki* actors engaged in battle with measles-spotted monsters, artists created prints that not only appealed to the interests of the viewer, but also disseminated information on measles and prevention practices during an outbreak.

This catalogue focuses on less commonly identified themes of woodblock prints, those relating to the fields of anatomy, medicine, and disease. Many institutions across the United States hold images from Japanese medical texts and prints, such as *Rules of Dietary Life* by Utagawa Kunisada, that feature interesting anatomical depictions. Despite the plethora of prints within this realm, art historical sources relating to the topic are few, and often included within larger books relating to larger themes of

technology and science.¹ Some sources also provide an outdated Eurocentric perspective, at times marginalizing the efforts of the Japanese physicians and anatomists. Traditional themes such as *Kabuki* theater, beautiful women, and landscapes are more popular subjects of study. Many of the books on Japanese woodblock prints provide broad views of the printmaking tradition and its masters but leave out references to more specialized medical or anatomical prints. For example, in *Japanese Popular Prints*, Rebecca Salter devotes part of a chapter to “well-being” in which she discusses medical prints and the history of medicine in Japan.² However, rather than discussing anatomy, her chapter is more concerned with the dissemination of physical medicine and the art that often accompanied it. The history is often the focal point of the texts and the prints that are referenced are not often thoroughly analyzed. Scientific articles such as “Medical Representations of the Body in Japan,” by Morris Low, for example, give historical background on the development of Japanese medicine and describe the dissemination of western medical knowledge through translated texts. This article discusses how western images of anatomical body changed the way in which Japanese medical practitioners viewed the body. While it gives historical context, as a scientific article, the art is not analyzed as it would be within an art history text.

¹ For example: Timon Screech. *The Lens within the Heart: The Western Scientific Gaze and Popular Imagery in Later Edo Japan*. Honolulu: University of Hawaii Press 1997.
Stephen Little. “The Lure of the West: European Elements in the Art of the Floating World.” *Art Institute of Chicago Museum Studies* 22, no. 1 (1996): 75-96. And

Morris Low. “The Impact of Western Science and Technology on ‘Ukiyo-e’ Prints and Book Illustrations in Late Eighteenth and Nineteenth Century Japan.” *Historia Scientiarum: International Journal Of The History Of Science Society Of Japan* 21, no. 1 (2011): 66–87.

² Rebecca Salter, *Japanese Woodblock Printing*. Honolulu: University of Hawai'i Press, 2002.

Scholarship's general neglect of medical prints does not mean that these images are less important than genres more recognizable to the modern viewer. Medical prints are significant because they provide a window into the growing interest in medicine and scientific practices during the Edo and Meiji periods. These prints also provide a way in which the Japanese people's agency can be recognized, as active participants in the modern era rather than receivers of foreign knowledge. The art historian Timon Screech is one of the few major contributors to this field and can serve as a guide as both an expert in the field of Japanese prints, specifically medical, and a scholar who recognizes the agency of the Japanese and makes a point to acknowledge this point within his writing.

To serve as a resource for future scholars of prints on this topic who may not have knowledge of Japanese, this catalogue highlights collections and sources that are accessible to an English-speaking audience. The catalogue is split into sections, an introduction and image essays. The image essays are divided for clarity based on the three topics of interest, anatomy, disease, then finally medicine. The former covers history and provides background knowledge on the topic. The latter analyzes the art. Much of the prints relating to anatomy, disease, and medicine fall within the time span of the Edo and Meiji periods, (1603-1868) (1868-1912), which was the height of *Ukiyo-e* and woodblock printing, so I begin with a historical analysis of these periods and the major developments within them.

Japanese Prints in the Edo and Meiji Periods

The peaceful stability of the Edo period catalyzed significant transformations in the class system, science, technology, and art. However, due to his fear of the growing

influence of foreign nations, *Shogun* Tokugawa Iemitsu (1604-1651) elected to close Japan's borders to most countries, thus enacting an isolationist policy. Due to the resulting seclusion of the island nation, much of the art during this time focused on indigenous styles and subjects. Woodblock prints, for example are some of the most recognizable of Japanese artworks from this time period. Japanese prints follow the stylistic traditions of *Yamato-e*, an indigenous style featuring flattened forms brought directly to the surface of the composition through distinct outlines and bold colors.³ The prints illustrate many subjects: from a beautiful woman applying makeup in a sparsely decorated interior or a *Kabuki* actor frozen mid-pose, to scenes of legendary samurai battles or iconic landscapes.⁴ These artworks capture the essence of the *Ukiyo-e*, or “images of the floating world” genre.⁵ However, Japanese prints beyond this category equally deserve attention. Japanese print artists produced a diverse range of prints, and some of these artists we now consider *Ukiyo-e* masters are among the artists who created illustrations for anatomical and medical texts.

³ Anna Willmann, “Yamato-e Painting,” Heilbrunn Timeline of Art History. The Metropolitan Museum of Art. Metmuseum.org. https://www.metmuseum.org/toah/hd/yama/hd_yama.htm (accessed June 2019).

⁴ Early woodblock prints in the Edo period were created in small workshops, hand colored by printmakers and mass produced, around two-hundred pages per day. However, due to the growing demand of prints, the process for their production evolved. The artist would pass on an image to a carver, who would then have it printed by the printer, with the publisher at the helm of the project. By using this method, each individual printer could print two-hundred pages per day, rather than two-hundred per workshop. Rebecca Salter, *Japanese Woodblock Printing*. Honolulu: University of Hawai'i Press, 2002.

⁵ Woldemar von Seidlitz, and Dora Amsden. *Impressions of Ukiyo-e*. New York: Parkstone International, 2016. 7.

In the periods of the Edo and Meiji, due to the growing internationality of trade in Japanese ports in both pre- and post-isolationist Japan, the country experienced an influx of knowledge from all corners of the world. Woodblock prints produced by artists during this time reflect the changes that occurred in Japanese culture and medical practice. I cite both the Netherland and China as two major contributors of medical knowledge within Japan, as both countries were allowed limited access to Japanese ports, even during times of isolation.

International Trade and Foreign Medicine

For much of Japan's history, China played a large role in the development of Japanese culture. Written language, clothing, religion, and art all had been imported from China at one time or another in Japanese history.⁶ Medicine was no exception. Traditional Chinese Medicine (TCM), one of the world's oldest surviving medical traditions, originated over three-thousand years ago and was brought to Japan from the mainland. TCM was used as a way to not only cure illness, but to promote health and prevent disease. The main sectors of TCM are herbal medicine, moxibustion, acupuncture, and massage.

Herbal medicine is the practice of using different types of herbs to cure or ward off diseases. While one of the easiest of the practices of TCM to understand, the application of herbal medicine can vary from person to person according to physician diagnosis. Factors such as age, general well-being, social, and natural setting were all

⁶ Richard Mason and J.G. Caiger. *A History of Japan*. Tokyo: Tuttle Pub. 1997. 37.

elements considered when creating herbal formulae.⁷ In TCM, the practitioner might create a mixture of up to 15 different herbs for medical treatments. Even with a single patient, herbal medicine could change depending on the response of the patient to the medication at different times. The way in which the herbs were given could also vary, such as a liquid extract, tablets, or dried herbs. Despite the complicated preparation, practitioners of TCM did have a source for their compounds, relying on manuscripts, such as the *Shang Han Za Bing Lun* for guidance. When the Japanese adopted TCM into their own medical vernacular, herbal practice, became one of the pillars of indigenous medicine known as *Kampo*. Within *Kampo*, the herbal formulae have been culled, with the practitioners focusing their attention onto a narrower selection of about 200 formulae prescriptions based off of the ones found in the *Shang Han Za Bing Lun*.⁸ Acupuncture and moxibustion similarly had their beginnings within China and were later imported to Japan by Chiso, a Chinese monk-physician, during the sixth-century as a result of the growing trade along the Silk Road.⁹ These different practices made their way to Japan through Korea and melded into a coalition of both indigenous practices and foreign, creating *Kampo*.¹⁰

⁷ Yu, F, T Takahashi, J Moriya, K Kawaura, J Yamakawa, K Kusaka, T Itoh, S Morimoto, N Yamaguchi, and T Kanda. "Traditional Chinese Medicine and Kampo: A Review from the Distant Past for the Future." *Journal of International Medical Research* 34, no. 3 (May 2006): 235.

⁸ Yu *et al.* 235-236.

⁹ Kobayashi A, Uefuji M, and Yasumo W. 2010. "History and Progress of Japanese Acupuncture." *Evidence-Based Complementary & Alternative Medicine (ECAM)* 7 (3): 359–65.

¹⁰ Yu *et al.* 234.

One of the Western powers that was allowed minimal access was the Dutch, through trade in the port town of Nagasaki. In the essay, “Scientific Transfer between Europe and Japan,” Salvatore Ciriaco states that the Japanese government believed that the Dutch had more interest in trade than the transmission of their religion, which made them an exception in Japan’s forced isolation policy. Fearing religious works entering the country, Japan set up the “Office of the Index” that went through Western publications, making sure that no religious texts were publicly disseminated.¹¹ The problem for this office, however, was determining what fell under the label of religious text or medical text. This meant that much of the Western medical knowledge from the Dutch was censored due to the fear of religious influence.¹² The Tokugawa shogunate did not always restrict texts relating to the medical field. It was of course interested in technology and sciences that could be beneficial to the development of the regime and the limited amount of medical texts that were allowed in Japan had a great impact on the medical field.¹³

Arguably the most significant work that stimulated Japanese interest in foreign medicine was the western anatomical text, *Ontleedkundige Tafelen* or *Anatomische Tabellen* by German author Johann Adam Kulmus. Published in Dutch in 1722, it was the first anatomy book to be translated into Japanese, eventually re-published as the *Kaitai*

¹¹ Salvatore Ciriaco. “Scientific Transfer between Europe and Japan. The Influence of Dutch and German Medicine from the Edo Period to the Meiji Restoration.” *Comparativ: Leipziger Beiträge Zur Universalgeschichte Und Vergleichenden Gesellschaftsforschung* 20, no. 6 (2010). 137.

¹²Ciriaco. 136.

¹³Ciriaco. 137.

Shinsho in 1774.¹⁴ As Low explains in “Medical Representations of the Body in Japan,” when Japanese physicians first saw images from Johann Kulmus’s *New Book of Anatomy*,

[They] were not able to initially to read the texts. They were, instead, attracted by the portrayal of the internal organs and skeletal frame, which differed from what they had seen before. The sheer density of detail gave the viewers the impression that they were looking at reality.¹⁵

Anatomical Study in Japan

Due to the limitations on all foreign texts by the Japanese government, it was exceedingly difficult during the Edo period for the general public to acquire foreign books. In fact, permission from the shogunate was required to purchase them. There was also the issue of language comprehension; translating foreign texts into Japanese was nearly impossible as this period predated the publication of Japanese-Dutch dictionaries. With the publication of the *Kaitai Shinsho*, however, the Japanese public for the first time could access western medical knowledge in their native language. Doctors began to practice Western style surgery, medical schools established, and multigenerational families of traditional Japanese physicians began to practice Dutch surgery techniques along with their own traditional techniques. Owning books such as the *Kaitai Shinsho*

¹⁴ Van Sant, John E. “Rangaku Medicine and ‘Foreign’ Knowledge in Late Tokugawa Japan.” *Southeast Review of Asian Studies* 34 (November): (2012) 209.

¹⁵ Morris F. Low. “Medical Representations of the Body in Japan: Gender, Class, and Discourse in the Eighteenth Century” *Annals of Science* 53:4, 1996, 351-352.

added to Japanese physicians' medical authority as practitioners of western style medicine.¹⁶

During the Edo period, there was a growing interest in anatomical study that focused on the western tradition of dissection. Dissection was previously not practiced in Japan, so organs and their functions were not directly observed. Understanding of the body's internal structures was sometimes inaccurate as a result. In the article, "The Evolution of the Study of Anatomy in Japan," the authors state that, "the testes were thought to produce bone marrow, milk was formed from the female blood in the spleen and stomach, and the reproductive organs ventilated through the ears by means of channels that passed from the spleen along the right side of the body."¹⁷

The first dissection in Japan was performed in 1754 by Toyo Yamawaki (1705-1762). After publishing his findings in his book, *Zoshi*, he began questioning the validity of the way in which Traditional Chinese Medicine described the functions of the body.¹⁸ Yamawaki presided over the dissection, but he did not perform it himself. A second notable Japanese anatomist was Shinnin Kawaguchi, who performed Japan's first dissection of the human brain.¹⁹ Kawaguchi studied European surgical techniques with his teacher Doi Kurisaki, and based on this instruction, he produced a book entitled *Notes*

¹⁶ Low. 352.

¹⁷ R. Shane Tubbs, Marios Loukas, David Kato, Mohammad R. Ardalan, Mohammadali M. Shoja, and Aaron A. Cohen Gadol. "The Evolution of the Study of Anatomy in Japan." *Clinical Anatomy* 22, Issue 4 (May 2009) 425-435.

¹⁸ Tubbs *et al.* "The Evolution of the Study of Anatomy in Japan."

¹⁹ Tubbs *et al.* "The Evolution of the Study of Anatomy in Japan."

on *Autopsy*, which describes the process of dissection on a cadaver.²⁰ The book contains drawings based on his findings, with the artist utilizing several different angles for a more accurate depiction of the body.

Confucian beliefs limited dissection in Japan. Practitioners of traditional Chinese medicine denounced the practice of dissection, disapproving of the need for bodies and human skeletons for anatomical knowledge, stating that, “one would not acquire further knowledge of bodies by studying dead organs, since the interpretation of such complicated matter is beyond human ability.”²¹ Dissection also went against Confucian directives to take care of one’s body given by one’s parents. Not only did Confucian thought restrict the practice of dissection in Japan, the indigenous religion of Shintoism also provided limitations on the handling of bodies. Shinto beliefs associate the dead with impurity, which lessened the desire and limited the means to perform dissections.²²

In order to get around these restrictions, physicians of the day would often employ members of the lowest class to perform the dissections.²³ This social class, known as the *burakumin*, were traditionally butchers, tanners, and scavengers.²⁴ As a result, one of the problems with early dissections is that many were not performed by the physicians themselves, indicating a lack of familiarity with internal organs. Another problem was

²⁰Tubbs *et al.* “The Evolution of the Study of Anatomy in Japan.” 428.

²¹Timon Screech, *The Lens within the Heart: The Western Scientific Gaze and Popular Imagery in Later Edo Japan*. Honolulu: University of Hawaii Press 1997. 203; Quoted from Sano Yasuda, a Kampo doctor who wrote *Against the Organs of the Body* or *Hizoshi*, a direct counter to Toyo Yamawaki’s *Zoshi*

²²Tubbs *et al.* “The Evolution of the Study of Anatomy in Japan.” 432.

²³Tubbs *et al.* “The Evolution of the Study of Anatomy in Japan.” 432.

²⁴Tubbs *et al.* “The Evolution of the Study of Anatomy in Japan.” 432.

that the procedures themselves were not in a scientific pursuit. As the procedures were performed by the *burakumin* who collected human bile to sell for medicinal purposes, the physician's interactions with the organs were limited to a short period of time in which they could only observe the procedure.²⁵ After the end of the Edo period, however, the use of human bodies for medical research changed. In the Meiji period, there was a desire for the enhancement of Japanese technology and culture in order to catch up to western powers. Due to these priorities, the Japanese began to adopt the practices of the westerners and physicians studied western anatomy and medicine. The Meiji government allowed the use of criminal's bodies for anatomical research in medical schools; at times, dissection was even used as a posthumous punishment for these individuals.²⁶ It was due to the efforts of Japanese physicians that allowed for the continued growth of Japanese anatomical research.

When comparing the works of western and eastern art, it is necessary to clarify that while the western depictions of anatomical art represents a more naturalistic view of the human body, that does not mean that artists of the east were incapable of realism. The images of the human body created in the Edo period featured a traditional style, one that was utilized for secular and educational art. Artists had no need for naturalistic depictions of the human body due to the prominence of *kampo*, where the body was classified in terms of yin and yang and the five phases theory of wood, fire, earth, water, and metal.²⁷ For diagnosis in *kampo*, it was unnecessary to have a pictorially accurate image of the

²⁵ Tubbs *et al.* "The Evolution of the Study of Anatomy in Japan."

²⁶ Tubbs *et al.* "The Evolution of the Study of Anatomy in Japan." 434.

²⁷ Low. 352.

human body. Therefore, artists could work in the traditional styles without the need for perfect anatomical renderings. Rather than focusing on ‘accuracy’ of depictions, so important to their western counterparts, the Japanese artists instead concentrated on making the subjects as accessible as possible, using popular subjects and themes to explain potentially complicated topics in order to reach a broader audience.

Images of Disease

During the Edo period especially, epidemics increased with the population density and the resulting crowded living quarters in urban areas. Illnesses also rose during this time due to the internationality of ports, such as Nagasaki, that brought in new peoples and their sicknesses. Two diseases that had several outbreaks during the Edo period, cholera and measles, are the focus of this section.

Measles is a prime example of an imported illness, which found its way into Japanese visual culture. Not an indigenous disease, it was brought to the country through the port city of Nagasaki.²⁸ As a highly infectious disease, spreading through contact from one infected person to another, it traveled across the country from the ports to the north of Japan. The disease often caused death by weakening the immune system, which is then attacked by other infections.

A tremendous amount of fear surrounded epidemics during this time and one of the ways in which this fear manifested was in the production of art. Woodblock print artists often depicted diseases such as measles and cholera according to certain visual

²⁸Ann Bowman Jannetta. *Epidemics and Mortality in Early Modern Japan*. Princeton University Press, 1987. 159.

conventions, so that consumers could easily understand what was being portrayed. Depictions of measles in woodblock prints generally personify the disease, commonly as a giant monster, and focus on the distinctive rash that appears on the body after a few days of infection. Often larger than the men and women facing off against it, the measles is a hulking figure with long disheveled hair and the iconic spotted rash. In some depictions, the measles is shown fighting with the masses. Banded together, the commoners unite against this enemy using their tools of trade as weapons. Other times, the measles demon is portrayed being banished. In these depictions, the large demon is being carried away by the common people or personifications of medical treatments. In some artistic portrayals, the measles assumes the guise of a hag-like character. These women act as a foil to samurai warriors or personified versions of medical treatments.

Another type of print focuses on disease prevention and eradication by providing large amounts of text that informs the viewer about different ways to treat disease. Depictions of Japanese verbal magic , where objects with similar sounding words were thought to be connected to one another, were quite common. As measles had no cure, people had to look to other methods of finding reprieve from this epidemic. Depictions of lectures on disease prevention and dietary care with accompanying text conveyed doctors' beliefs that good dietary practice could prevent or lessen the severity of different diseases. *Kabuki* actor prints became a subsection of this genre. As no class was safe from the epidemics, even actors fell victim to illness. These prints not only provided a sort of advertisement for specific actors and would include textual information on disease lessening practices such as foods and activities to avoid during an outbreak.

Measles was not the only disease that was personified in art. Another such epidemic that found its way into printed media was cholera. Cholera, like measles, had several outbreaks during the Edo period. A diarrheal disease it easily spread from person to person in cities with large populations, it also came to Japan from abroad, once again beginning in the port town of Nagasaki. It was here where the first cholera epidemic began in 1822, with another appearing in 1858, which spread farther and attacked stronger than the first.²⁹ The Japanese knew that diseases such as cholera came from foreigners. However, due to the unequal treaties they were forced to sign with western nations, they were required to open their ports, allowing foreign diseases to enter the country.³⁰ The fear of this disease was one of the causes for the creation of art featuring disease as a subject.

Similarly to measles, cholera was also often personified in prints. Rather than a large creature or hag with spots, the cholera demon was often more abstract, as the disease did not have any visual indications like measles. The cholera demon was, in some cases, drawn as an anthropomorphic furry black creature, being attacked with antiseptics. Other times it was depicted as a tiger, whose unforgiving ferocity parallels the speed at which the disease spread and killed those afflicted. A foreign animal, the tiger was a visual sign that represented the disease came from abroad.³¹

²⁹ Jannetta. 156.

³⁰ Janetta. 168.

³¹ Laura Allen. "Contagious Disease." UCSF Japanese Woodblock Print Collection [Japaneseblockprints.library.ucsf.edu](http://japaneseblockprints.library.ucsf.edu). <http://japaneseblockprints.library.ucsf.edu/contag1.html> (Accessed June 2019). 3.

Woodblock prints of diseases were more akin to modern day posters than fine artworks. With the audience for these prints mostly being the lower classes, woodblock prints had to feature subjects that were relevant to a broad audience. As epidemics ravaged many parts of Japan during the Edo period, this subject was in the forefront of the minds of the common people. However, these prints were not simply informative; by anthropomorphizing the diseases, artists were able to feature several different genres within one print. Depictions of disease could also feature heroes defeating them, making the print both a disease depiction and a warrior image. With an image of a *Kabuki* actor who survived the measles, the artist created both an actor print as well as an informative print on disease prevention. Through this method, artists could create an image that could be interesting to a wider variety of people. Prints could be informative but also feature popular subjects and styles. Sometimes providing textual information on the treatment of these diseases, and sometimes not, the prints also functioned as a source of hope for the afflicted and the well, that this disease could be defeated or prevented. These prints are significant in that they provide a historical view into the minds of the people of the Edo and Meiji periods. Disease prints illustrate just how prevalent diseases were during this time; that woodblock prints were not only used to depict popular media, but also were used as a way to spread information. Through these disease prints, artists not only expressed themselves, but also reveal the fears of the nation.

The Modernization of Medical Practices in Japan

The end of Japan's isolationist era was largely propelled by the 1850 American military expedition led by Commodore Matthew Perry. As a result, Japan was inundated with foreign goods and technology. The growing demonstration of military strength by

the west, along with growing discontent of the lower classes, catalyzed the Meiji Restoration in 1868 in which the Japanese people were split between those who backed the emperor Meiji and those in support of the Shogun. Eventually those in support of the Meiji emperor were victorious.³² Thus, an era of modernization began, at the cost of traditional Japanese culture, which will be illustrated by the prints appearing in this catalogue.³³

As Japanese medical professionals developed new methods of researching and exploring the human body, they fused their own developed methodologies with newly discovered western techniques. For physicians of both traditional and foreign medical practices, art became one of the primary methods of transmitting relevant medical information. From prints diagramming different acupuncture points to anatomical views of the human body, visual images provided the means to display newly formulated medical concepts. In this way, Japanese medical professionals were able to share their newfound knowledge through the cost-accessible medium of woodblock prints.³⁴

While it is true that western countries played a notable role in this part of Japanese history, it is important to reject an overly simplistic notion that Japanese

³² Mason. 258.

³³ For more information on the woodblock prints of the modernizing period of the Meiji, see, Donald Keene, Louise Erica Virgin, Anne Nishimura Morse, and Frederic A. Sharf. *Japan at the Dawn of the Modern Age: Woodblock Prints from the Meiji Era, 1868-1912, Selections from the Jean S. and Frederic A. Sharf collection at the Museum of Fine Arts, Boston*. Boston, Mass: Museum of Fine Arts, Boston 2001.

³⁴For more information on the effects of western art in Japan, see, Hiroko Johnson. *Western Influences on Japanese Art: The Akita Ranga Art School and Foreign Books*. Amsterdam: Hoteli Publishing, 2005.

physicians and artists were passive receivers in this transmission of medical and anatomical knowledge.³⁵ Although they looked toward Dutch medical texts with particular interest in the techniques and depictions of the body, medical practitioners in Japan took it upon themselves to understand and further develop their own indigenous medicine during this period. Though the medical practices were foreign in origin, the interest in and advancement of those practices were strictly Japanese.

The aim of this catalogue, however, is not to argue the perceived value or directionality of influence on medical and artistic development in Japan. Rather, this project seeks to highlight works of art created in the midst of this cross-cultural dialogue between nations. Prints within this catalogue feature subjects ranging from those based purely in East Asian traditions, such as acupuncture, to depictions of translated Dutch anatomy texts. The selected prints exemplify the three most commonly recurring themes within this seldom studied genre of woodblock prints: Anatomy, Depictions of Disease, and Medical Practice. These images also demonstrate the common iconography, as well as a few that subjects that appear to be unique to the genre.

The prints discussed in this catalogue often feature imagery uncommon to the western eye, with exclusively Japanese subjects and themes such as elements of Japanese verbal magic. By highlighting a less prominently studied genre of Japanese woodblock prints, this catalogue provides the reader with a broader vocabulary in relation to

³⁵ Timon Screech, "The Birth of the Anatomical Body." In N. Rousmaniere, ed., *Births and Rebirths in Japanese Art*. Hotei Press: Leiden (2001), pp. 83-140.

Screech's writing was my model for this approach of analyzing both eastern and western art while also giving the eastern artists agency rather than portraying them as just receptors of knowledge.

Japanese art. It is intended to be an asset to future research by providing background information and analysis as well as supplying a resource for the study of artworks that would normally be linguistically inaccessible. The images are all located in U.S. collections, and it is hoped that this catalogue will become a resource for future art history students.

Chapter 1: Views of the Body in the Edo and Meiji Periods



Figure 1.1: *Diet Advice for a Healthy Sex Life*, 1855.
Woodblock print, ink and color on paper, 49.2 x 35.5 cm.
Double *Ōban*, Tate-e. Contributing Institution: UC San
Francisco, Special Collections.

In this woodblock print, a courtesan, garbed in flowing multi-colored kimono and ornate hairpins, nearly completely fills the page. She is depicted with her kimono open and smoking a tobacco pipe in her right hand, with her left hand resting atop the handle of a beautifully decorated lacquer box.

While unattributed, the image is most likely designed by noted woodblock print designer Utagawa Kunisada. I make this attribution based on the image's subject and style, as it is comparable to one of his known works, *Model for Men's Dietary Care* (Figure 1.2).³⁶ Also known as Toyokuni III (1786-1865) he started as a book illustrator before moving into other genres such as actor, warrior, and landscape prints. A student of Toyokuni, Kunisada was one of the most prolific and well-known artists of the late Edo period who designed prints until his death in 1865.³⁷ Similarly to Kunisada's previous work, *Diet Advice for a Healthy Sex Life* exposes the woman's chest and stomach, revealing figures at work within her body. Etsuo Shirasugi states that the purpose of this image (*Diet Advice for a Healthy Sex Life*), as well as its companion *Rules of Dietary Life*, was twofold. First, it was meant to educate the public on the functions of organs within the body, the five viscera and six entrails (*gozo roppu*), which are a part of traditional east Asian conceptions of the body. Secondly, the images warned the public

³⁶ Etsuo Shirasugi, "Envisioning the Inner Body During the Edo Period in Japan: Inshoku Yojo Kagami (Rules of Dietary Life) and Boji Yojo Kagami (Rules of Sexual Life)." *Anatomical Science International* 82, no. 1 (March 2007): 46-52.

³⁷ Andreas Marks, *Japanese Woodblock Prints: Artists, Publishers, and Masterworks 1680-1900*. 120.

against excessive alcohol consumption and sex or *inshoku* and *boji*.³⁸ The *Yojo Kun* (*Lessons in Healthy Living*) was a popular publication by Kaibara Ekiken (1630-1714), a physician turned Confucian philosopher, which laid out instructions for living a healthy life.³⁹ *Diet Advice for a Healthy Sex Life* displays the core beliefs of the *Yojo Kun*, such as the concern that too much sexual intercourse could lead to an early death.⁴⁰

Within the courtesan's body, women are depicted performing tasks related to their positions in each of the body's organs, with more descriptive text surrounding them. For example, in the spleen women are cooking and in the liver they are processing foodstuff.⁴¹ The inside of the human body has been transformed into a metaphorical living space rather than presenting a realistic depiction of internal organs. This method of depicting a livable space within the human body came from the precedent of the *Kibyoshi* ("Yellow Cover Booklets"), which similarly illustrates the functions of the human body through verbal analogy rather than depicting and describing anatomical organs directly.⁴²

Some of the internal organs depicted within the body of this particular print were previously unknown to practitioners of *Kampo* and traditional Chinese medicine. The ovaries and fallopian tubes were first acknowledged after the introduction of western

³⁸ Shirasugi. 49.

³⁹ The Editors of Encyclopædia Britannica. "Kaibara Ekken." Encyclopædia Britannica. December 13, 2018. Accessed June 2019. <https://www.britannica.com/biography/Kaibara-Ekken>.

⁴⁰ Shirasugi. 49.

⁴¹ Shirasugi. 50.

⁴² Shirasugi. 50.

medicine, and their inclusion in the image indicates that the artist had a greater sense of anatomical knowledge.⁴³

This print, as well as its pendant, *Model for Men's Dietary Care*, served a different function than the others discussed within this section. Rather than a medical illustration for doctors and physicians, these prints were made for lower-class consumption and drawn in such a way that a medical background was unnecessary for understanding the internal structures of the body.

In the images Figure 1.2 and Figure 1.3, a similar scene unfolds. In both works, a man sits cross-legged in a void interior. Each man is enjoying a meal of fish, set before them on a plate or small table. Similarly, they are both drinking, with heads thrown back, enjoying the alcohol from the beautifully decorated jugs provided at the table. Though both are dressed in different types of clothing, each wears his garments in a way that presents a view of the internal structures of the body. The organs, however, are not ordinary depictions. Instead, they have been altered, featuring tiny men performing various tasks within the body. Both prints, created by different artists, follow the tradition of depicting ideas from the medical book *Yojo Kun*, which warned against excessive eating and drinking, a concern demonstrated by the male figures within the prints. The popularity of this book led to its ideas and teachings becoming everyday knowledge, making the subject of these lessons, visually recognizable.⁴⁴

⁴³ Shirasugi. 49.

⁴⁴ Shirasugi. 50.

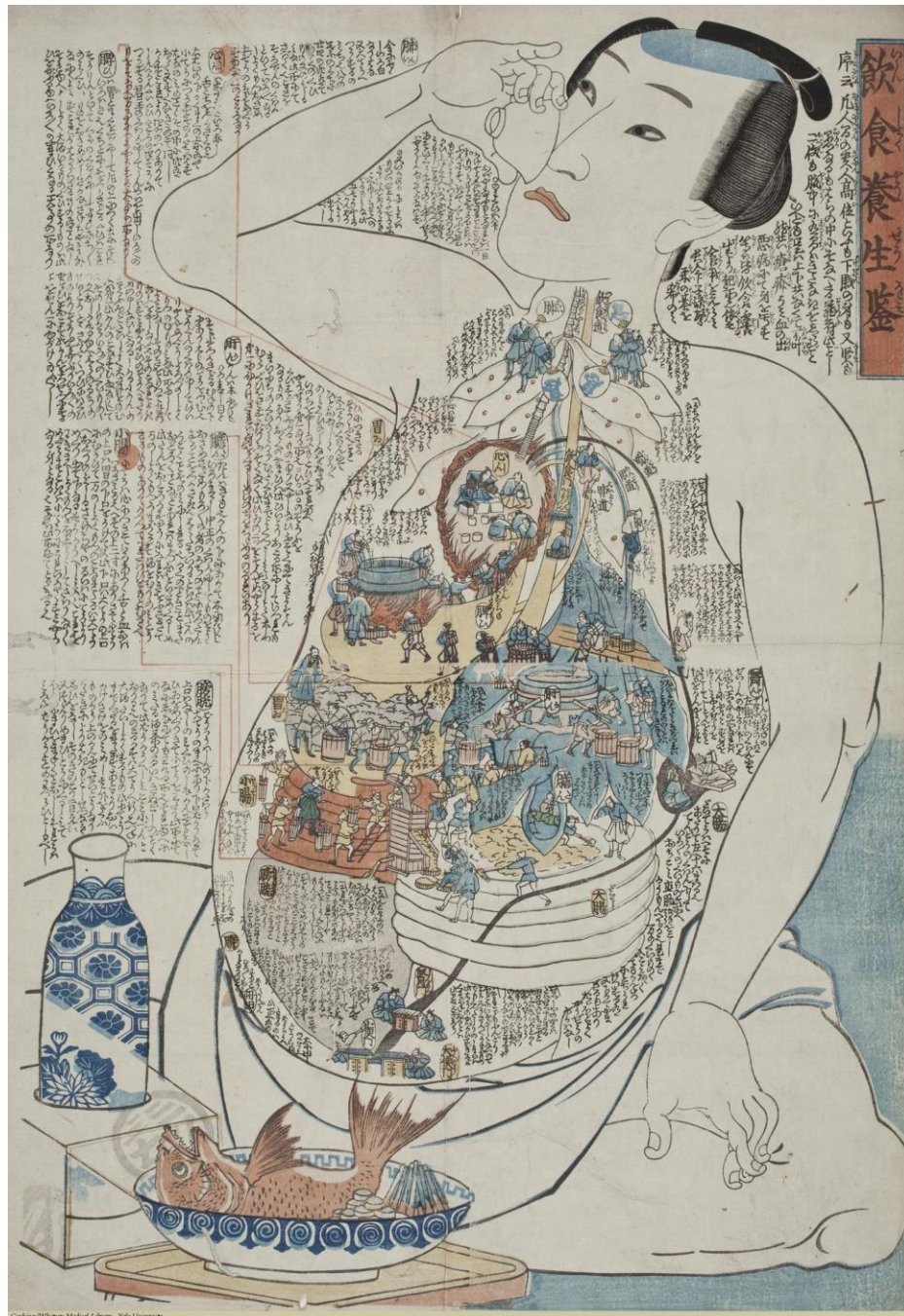


Figure 1.2: Utagawa Kunisada, *Model for Men's Dietary Care*, 1848-54. Woodblock print, ink and color on paper, 52.6 x 40.8 cm. Double Ōban, Tate-e. Contributing Institution: UC San Francisco, Special Collections.



Figure 1.3: Utagawa, Yoshitsuna, *Model for a Healthy Diet*, 1855. Woodblock print, ink and color on paper, 42.3 x 32.5 cm. Double *Ōban*, *Tate-e*. Contributing Institution: UC San Francisco, Special Collections.

What may not be as obvious is the meaning of the small figures depicted within the bodies, which metaphorically visualize the functions of the different organs within the human body as they were understood at the time. For example, “at the liver, several men

are pushing a large millstone grinding food into powder.”⁴⁵ Estuo Shirasugi, in “Envisioning the Inner Body During the Edo period in Japan,” gives an excellent point as to why the functional anatomy is depicted in such a way. Since much of the medical knowledge during this time was centered in traditional Sino-Japanese learning, the depiction of the organs described within the work follows the visual precedent of depicting the *gozo roppu* (five viscera and six entrails), which became a main feature of anatomical depictions in *Ukiyo-e*.

In Figure 1.4, a man is depicted, sitting cross legged on the ground, his left hand holding a fan, and the right placed upon his knee. His head is tilted skyward, with miniature depictions of figures scattered throughout the inside of his body. A second image, Figure 1.5, provides the reverse view of the first, Figure 1.4 with a larger cast of characters. Beneath these figures, internal organs are illustrated. The portrayal of the organs is not anatomically correct, in both shape and coloration, which perhaps indicates that the artist did not intend to show a realistic depiction of the internal structures of the body. Instead, the figures depicted within the body are the focal point, pictured in front of the organs, well represented in the Japanese style. The actors are used as a way to dramatize the different functions of organs within the body, making their appearances more important for understanding the functions than the organs themselves. Following the visual precedent of works such as *Diet Advice for a Healthy Sexual Life* and *Model*

⁴⁵ Shirasugi. 50.

for *Men's Dietary Care* [Figure 1.1 and 1.2-1.3], this image features a man with organs on display with their functions personified. It differs from the previous



Figure 1.4: *Internal Bodily Functions Dramatized by Popular Kabuki Actors*, late 19th C. Woodblock print, ink and color on paper, 51.7 x 39.9 cm. Double Ōban, Tate-e. Contributing Institution: UC San Francisco, Special Collections.



Figure 1.5: *Back and Abdomen, Children's Games*, late 19th C. Woodblock print, ink and color on paper, 51.2 x 36.9 cm. Double *Ōban*, *Tate-e*. Contributing Institution: UC San Francisco, Special Collections.

two examples however, in its use of *Kabuki* actors, with their names labelled in red, as internal organs.

Another difference between this and similar works is that it has a companion image that displays the back side of the same subject. The title of the image showing the reverse of the man, *Back and Abdomen, Children's Games (Senaka ni hara kodomo asobi)*, Figure 1.5, indicates a shift in the activities of actors. Rather than demonstrating the function of organs, the second image depicts the *Kabuki* actors participating in children's games. Though the artist is unknown, this work is significant in that it provides a new theme of illustrating the internal structures of the body as *Kabuki* actors. Such images suggest that, as technology and medicine became more widespread, understanding the functions of the body was important not only to medical doctors, but also to the general public. Moreover, its use of two separate prints in order to provide a complete view of the main figure is atypical.

Though the artist utilized the subject of portraying the internal structures of the body, they were able to exhibit their creativity not only by choosing a different subject (*Kabuki* actors in place of citizens), but also by deciding to create a companion print that displays the direct reverse of the same figure. Rather than two subjects, the artist in this case used three subjects, actors, internal structures, and depictions of commonly known games. Though prints during this time often had more than one subject, the use of three was somewhat unique, and displays the artist's originality.



Figure 1.6: Utagawa Kuniteru III, *Ten Realms Within the Body*, 1885. Woodblock print, ink and color on paper, diptych, 35.7 x 47.4 cm, *Ōban Tate-e*. Contributing Institution: UC San Francisco, Special Collections.

In this image, a woman reclines with her chest and stomach bare. One hand points to her bulbous stomach, which contains images of people performing various tasks. This image, as the title indicates, makes reference to the Ten Realms (in Japanese, *Jikkai* 十界), which is a Buddhist concept.

The Ten Realms refer to the five physical sense organs, which include the eyes, ears, nose, tongue, and body, and the five sense objects, visual, auditory, olfactory, gustatory and tactile. These realms within the body also relate to the ten different states of being within the Buddhist tradition, relating to reincarnation. These include hell, hungry

ghosts, animals, demigods, human-beings, divinities, disciples of the Buddha, solitary Buddhas, bodhisattva, and finally Buddha.⁴⁶

In this image, the different classifications of being are personified, with contemporary figures acting out the different states, the negative ones extending counterclockwise to the left of the top image, and the positive clockwise to the right starting at the top. For example, in the second scene from the top on the right, a man is kneeling before a seated figure. The accompanying text denotes this is the state of bodhisattva. Diagonally across from this scene is the animal state, in which the figure of a canine aggressively approaches a male figure, who has taken refuge in a tree, with a sword pointed to the beast.

In the center of the Ten Realms is a single figure, perhaps the baby of the woman depicted, its future as part of one of the realms yet to be determined.

In image 1.7, a male figure is seated, one knee bent beneath him. His clothing and hairstyle are quite different from traditional fashions. Rather than a *kimono* or *yukata*, this figure wears light gray pants and a high collared black shirt, pinned at the top by a button. His facial hair also is unique, with a moustache and goatee rather than a clean-shaven face. Together, these elements indicate that this figure could be either a foreigner or perhaps a Japanese man in western attire.⁴⁷ Comparing this image to another

⁴⁶ Robert E Bushwell,; Donald S Lopez. *The Princeton Dictionary of Buddhism*. Princeton University Press, 2014. 220.

⁴⁷ It is important to note that during the Meiji period (1868-1912), it became common practice to absorb aspects of western culture, including clothing. Even the imperial family was depicted in

that depicts foreigners, such as Figure 1.8 by Yoshikazu, the figure standing to the far left of the center panel has similar facial hair to Rodonsai's seated figure. Clothing choices are comparable as well. If the man is indeed a foreigner, the reason for Rodonsai's depiction of one in this manner is debatable. It may be that he was indicating that all humans have the same organs and that they could all be classified in this manner.

This woodblock print classifies the internal organs based on the different social tiers in Japanese society. During this period of growing scientific curiosity, the common people were often the audience for these types of prints. Each of the figures are identified with a specific organ. Daimyo and his retainer are the liver and heart. The farmer represents the kidney. The artisan is the stomach and the merchant is the lungs. According to the Edo-period class system, the samurai were at the top, followed by the farmer, the artisan, and finally the merchant. Each of these different occupations are personified within the man's body, with a bald spectacled man looking quite befuddled on the bottom right as he takes in the scenes unfolding above him. The title of this work *Shi Nō Kō Shō* is actually a pun relating to the subject. *Shi*, meaning death, *nō*, meaning suffering, *kō*, meaning effectiveness, and *shō* meaning life all can be read in another manner as samurai, farmer, artisan, and merchant respectively.

Interestingly, despite being at the bottom of the social hierarchy, the merchant class was often times, the wealthiest. This can be seen in Rodonsai's print through the clothing worn by the merchant figure. Compared to the farmer and artisan, the merchant

western garb during this time, such as Chikanobu's *The Illustrious Nobility of the Empire*, which depicts the imperial family in western garb, and the Emperor with western style facial hair.



Figure 1.7: Rodonsai, *Suffering, Death, and Effective Life: Metaphorical Classifying Organs According to 4 Levels of Social Status, Shi Nō Kō Shō* (samurai, farmer, artisan, merchant), 19th. Century. Woodblock print, ink and color on paper, 21.8 x 31.3 cm, Ōban Tate-e. Author: Nozoki Shōshiki: Contributing Institution: UC San Francisco, Special Collections.

wears a more decadent wardrobe with multiple kimono. The merchant also is seen seated with a great amount of texts, rather than working with his hands.

On the opposing side, the samurai at the top found themselves to be quite poor during this era of peace, as there was no way for them to make money. This created tension between these two classes, as the samurai often found themselves indebted to the merchant class, despite the latter's position as the lowest on the social ladder. During this period of growing scientific curiosity, the common people were often the audience for these types of prints.



Figure 1.8: Yoshikazu, *Coming and Going from a Steamship in America*. 1861. Woodblock print, triptych, *Ōban Tate-e*. Contributing Institution: Library of Congress.

Figures 1.9-1.10 are the Japanese renderings of the *Kaitai Shinsho*, the 18th century Japanese reproduction of the Dutch medical text, *New Book on Anatomy*, which was published in the Netherlands in the 1720's. The National Library of Medicine owns a

copy of the entire publication with high quality images available online. Figure 1.9 features a human skull, with details highlighting different parts added around the main image. Each detail is labeled with a description, which suggests that these images would have been used for educational purposes.

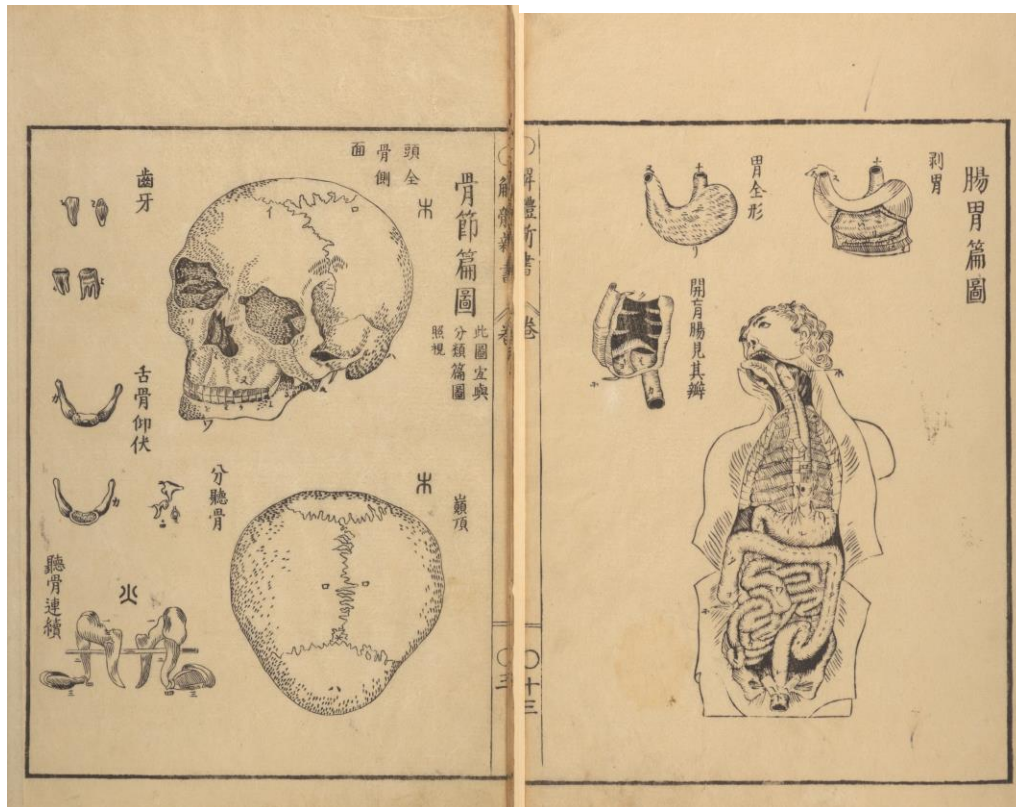


Figure 1.9-1.10: Pages 39 and 58 of the *Kaitai Shinsho* (Japanese Translation of a Netherlandish Translation of Johann Adam Kulmus', *New Book on Anatomy*, 1722.) 1774. mWoodblock print, ink on paper. Japanese Translation Contributors: Sugita Genpaku, 1733-1817, translator; Nakagawa Jun'an, 1739-1786, proofreader; Ishikawa Genjō, 1743-1815, Katsuragawa Hoshū, 1751-1809, proofreaders; Maeno Ryōtaku, 1723-1803, translator; Odano Naotake, 1750-1780, illustrator Publisher: Suharaya Ichibē. Contributing Institution: U.S. National Library of Medicine.

Figure 1.9 features a man, cut open from the mouth, with organs exposed down to the abdomen. As with image Figure 1.9, details are included on image Figure 1.10, as well as smaller individual drawings of body parts from the larger depiction.

Illustrated by Odano Naotake, a student of Hiraga Genmai, an entrepreneur and scholar rather than an *Ukiyo-e* master. Genmai's collections of western books and illustrations impacted the talented Naotake, who from them learned concepts of western art such as perspective and chiaroscuro. Through Gennai, Naotake was able to meet scholars of Dutch studies in Edo, such as Sugita Genpaku, the main translator for the *Kaitai Shinsho*.⁴⁸ Portions of the work were also engraved by Eisho Yoshio in 1773, whose work features a European style of drawing based on close study of the original engravings.⁴⁹

Images such as the ones within the original *New Book on Anatomy* astounded Japanese doctors, and a select group of Japanese medical professionals decided that it would be worth translating the entire document in order to reach the broader audience of Japanese physicians. Rather than the flattened and colorful Japanese style of print, such as the ones of Shinnin Kawaguchi (1736-1811) seen in Figure 1.11, images such as Figure 1.9 feature a more western style with an emphasis on details to give a greater

⁴⁸ Suntory Museum of Art, *Seven Daring Years: Odano Naotake and Akita Ranga*. (November 2016), Exhibition Catalogue, Accessed June 2019, https://www.suntory.com/sma/exhibition/2016_5/display.html.

⁴⁹ Gordon Mestler, "A Galaxy of Old Japanese Medical Books with Miscellaneous Notes on Early Medicine in Japan Part I. Medical History and Biography. General Works. Anatomy. Physiology and Pharmacology," *Bulletin of the Medical Library Association* Vol 42-3, 1954. 312.

For more information on the collaborative publication of the *Kaitai Shinsho*, see, Nishiyama Matsunosuke and Gerald Groemer. "Edo Publishing and Ukiyo-e." In *Edo Culture: Daily Life and Diversions in Urban Japan, 1600-1868*, 64-75. University of Hawai'i Press, 1997.

sense of naturalism. rather than blocks of color. As discussed previously, anatomy study was a major part of art education in Europe during this time. As a part of their education, students would create anatomical drawings based on *écorché*⁵⁰ figures, placed in classical poses.⁵¹ Such practice can be seen in Figure 1.10 where the figure resembles classical sculpture, rather than a figure from life.

Figures 1.11 and 1.12 belong to one of the most significant anatomy books in Japanese history, Shinnin (Nobuto)⁵² Kawaguchi's *Kaishi Hen* or *Notes on Autopsy*. The text, published in 1772, contained Kawaguchi's notes from his dissection of two cadavers and colored woodblock images of the internal structures of the bodies that he viewed. Significantly, he was the first person in Japan known to dissect the human brain and, unlike authors that came before him, Kawaguchi published his findings on dissections that he performed himself.⁵³ In the book, *History of Anatomy: An International Perspective*, the author states that Kawaguchi's teacher was actually opposed to Kawaguchi publishing his work, due to the fear of it potentially contradicting the findings of their predecessor Yamawaki. Despite this, Kawaguchi's findings were eventually

⁵⁰ Meaning 'Flayed' in French, these models feature a view of the musculature of the body from which artists could see how the muscles would look in different poses.

⁵¹ Anne Darlington, *The Teaching of Anatomy and the Royal Academy of Arts 1768-1782*, Journal of Art & Design Education Vol 5, No. 3, 1986.

⁵² In several different texts, the names Shinnin and Nobuto both appear as chosen names for Kawaguchi.

⁵³ Tubbs *et al.* "The Evolution of the Study of Anatomy in Japan."

published.⁵⁴

This book features several images of Kawaguchi's findings, all displaying the same style of print. The prints are all colorful, and utilize a flattened style, which seems cartoonish in nature. The figures display the human body devoid of blood, with the skin peeled back to reveal the organs beneath the surface. While not done in a naturalistic style, the viewer can still understand what is being depicted. Aoki Shukuya completed these prints, with this series of works being the artist's most recognized works of print.⁵⁵ As these images were printed with the woodblock method, it is understandable that they would feature the artistic conventions associated with this genre.

As a manual for dissection, this publication indicates the growing interest of the public in the internal structures of the body and the perceived value of understanding the appearance and function of organs.

⁵⁴ Tubbs. 23.

⁵⁵ In my research of this print, it appears that this artist mostly worked on paintings rather than woodblock printed media.



Figure 1.11: *Shōbo Ken Sui No Zu*. Part of the *Kaishi Hen* by Shinnin Kawaguchi. 1772. Woodblock print, ink and color on paper. Contributing Institution: U.S. National Library of Medicine, National Institutes of Health, Health & Human Services.

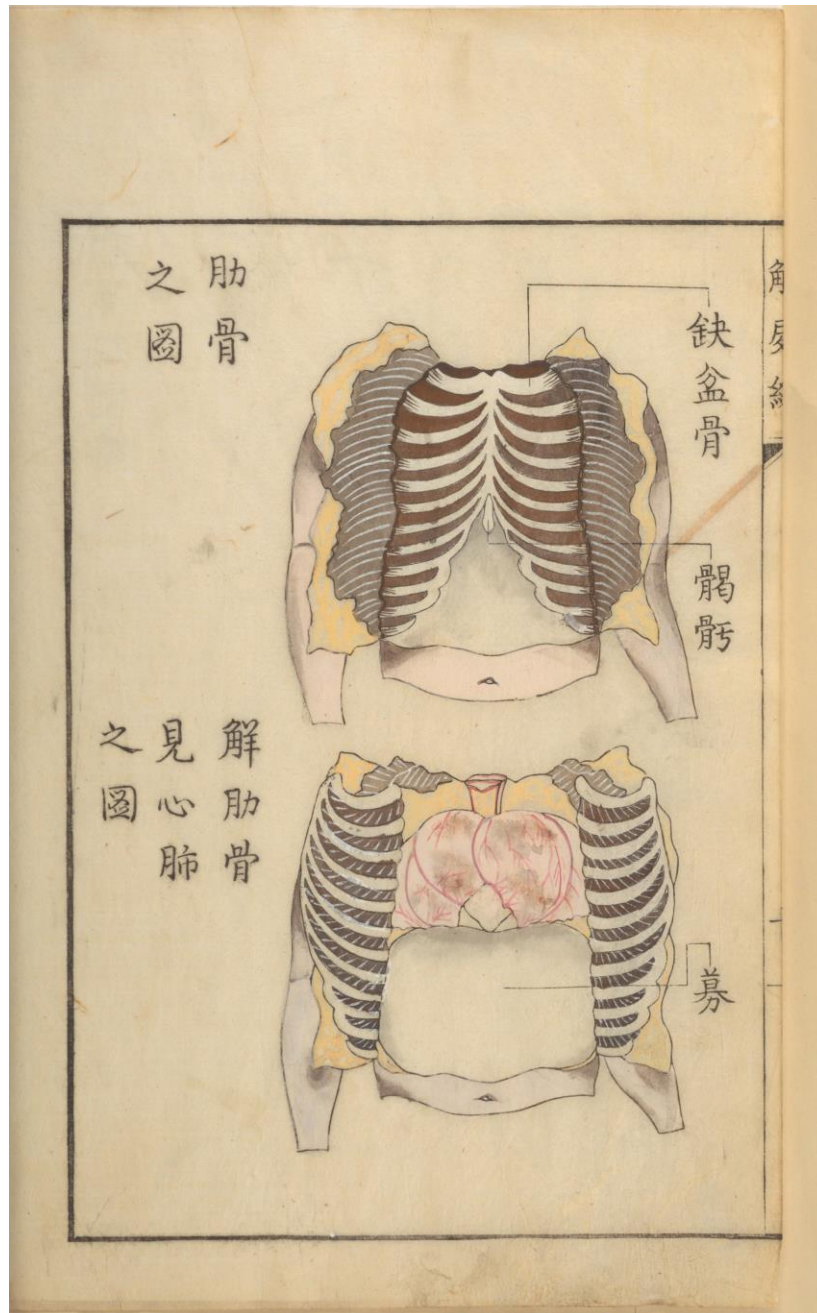


Figure 1.12: Shinnin Kawaguchi, *Rokkotsu No Zu, Kai Rokkotsu Ken Shinpai No Zu*, From *Kaishi Hen* or *Notes on Autopsy*. 1772. Woodblock print, ink and color on paper. Publisher: Hakubundō Tanaka Ichibē [and 2 others] Contributing Institution: U.S. National Library of Medicine.

Chapter 2: Depictions of Disease in Japanese Visual Culture



Figure 2.1: Utagawa Yoshifuji, *Shipping Measles Away*, 1862. Woodblock print, ink and color on paper, 35.9 x 24.3 cm, *Ōban Tate-e*. Contributing Institution: UC San Francisco, Special Collections.

During the year of 1862 Japan had one of its largest measles epidemics, coming from international trade ships in Nagasaki and reaching up to Edo and as far as Sendai.⁵⁶ This woodblock print, and many others, came from the onslaught of this epidemic. In creating these prints, artists gave visual form to the sickness, in order to lessen fears, and sometimes to educate the public on these types of illnesses.

In this woodblock print by Utagawa Yoshifuji, titled *Shipping Measles Away*, the measles illness is personified as a large spotted figure, with hair spilling over the shoulders. The figure is carried on a palanquin by humanoid figures with an assortment of anthropomorphized objects. Some of these figures are the various types of medicinal remedies for disease prescribed by in traditional medicine. Living healthily with a proper diet was encouraged, so artists inserted foods such as pickled radishes, red beans, and loquats into measles prints, as they were thought to be good for disease prevention.⁵⁷ In *Shipping Measles Away*, we see a loquat depicted as one of the carriers of the palanquin as they attempt to dispose of the measles. Such imagery provides a visual gateway into the minds of the people of the Edo period, who, in fighting against a disease they could not see, found reassurance in images depicting the prevention of disease through good diet.

⁵⁶ Jannetta. 124.

⁵⁷ Smits, Gregory. "Warding off Calamity in Japan: A Comparison of the 1855 Catfish Prints and the 1862 Measles Prints." *East Asian Science, Technology, and Medicine*, no. 30 .2009. 13-16.



Figure 2.2: Utagawa Yoshimori, *Chasing Measles Away*, 1862. Woodblock print, ink and color on paper, 34.5 x 24.3 cm, *Ōban Tate-e*. Contributing Institution: UC San Francisco, Special Collections.

This print by Utagawa Yoshimori, depicts another way in which the measles epidemic was shown, as a large group of barely clothed figures with men, women, and even children measles. All speckled with the measles disease, figures scramble from a mob of citizens. Within the mob are various individuals of different professions.

Courtesans are shown, dressed fully in their finery, one brandishing her musical instrument in an offensive pose, as if ready to attack. In the crowd an oarman is seen holding up his oar as a weapon, as well as a farmer with his straw hat and hoe, a sumo wrestler, and merchant with his abacus. Leading the pack are two slightly larger figures, dressed in long robes. One blows into a conch shell trumpet while the other, with a large hat, waves his baton, banishing the demons. These figures appear to be priests belonging to two different Japanese faiths: Shugendo on the left, as indicated by his light-colored clothing and small black hat, and Shinto on the right.

Not everyone, however, looks towards the measles figures. Some members of the mob are looking to the left at four men who are frowning, arms crossed or at their sides, one of whom is a Buddhist monk with pale blue *kesa* robes and shaved head. These four represent those who profit from disasters, in this case disease. Pharmacists who sell the drugs to the afflicted and monks who see an influx of people during times of strife are commonly shown in a negative light in disaster prints.⁵⁸

In another image that comes from the 1862 measles outbreak, the measles demon meets a violent defeat. Once again, the artist personifies the measles as a large spotted figure with wild hair. Instead of having individuals casting it away as seen in Figure 2.2, in this image (2.3), smaller figures actively fight and tie down this monster.

⁵⁸ Smits. 15, 16.



This print is a riot of movement, with people and personified folk remedies working violently together to beat down the measles demon.⁵⁹ The arrangement of the twisting figures draws the eye down from the foot of the creature to its face. The artist of this print, Utagawa Yoshifuji also created the previous print *Cat*, 12. The artist's preference for a more graphic style can be seen in a comparison of the two works, both having blocks of bright colors upon an empty background. Rather than a focus on the details of individual faces, in these two prints, Yoshifuji instead concentrates on movement, attempting to represent a turbulent fray of individuals, with bodies stacked upon one another in a rush of motion.

In the top right corner, a female figure, identifiable as a courtesan by her fine clothes and hairpins, uses her pillow as a weapon against the measles demon. During the measles outbreak, it was the courtesan who most often suffered from illness and disease as she came into close contact with many patrons. Others in society, including ferry boat operators, were also more affected by this disease and are depicted in this image.⁶⁰ As both professions required contact with many people, death and illness were common.

Common Edo-period beliefs are seen in this image as well. For example, a figure with a bucket over his head represents the superstition that placing an empty horse-feeding bucket on the head of the afflicted would lessen the severity of measles. In his article, "Warding off Calamity in Japan: A Comparison of the 1855 Catfish Prints and the 1862 Measles Prints," Gregory Smits notes the lack of deities and doctors in this

⁵⁹Smits. 26.

⁶⁰Smits. 16.

particular print.⁶¹ He states that this image exemplifies the idea that the disease could be controlled by the individuals without the intervention of physicians or deities.



Figure 2.4: Yoshiiku, *Casting Out the Devil of Measles*, 1862.⁶² Woodblock print, ink and color on paper, diptych, *Ōban Tate-e*. Publisher: Isesho. Courtesy of the Clendening History of Medicine Library, University of Kansas Medical Center.

⁶¹Smits. 16.

⁶² After looking at the translation of the artist's name on the print and at the same print housed at the National Theater in Japan, the artist is actually Yoshiiku rather than Yoshichiku.

In this diptych, two samurai face one another. On the left, a man stands arms crossed above a demon prone on the ground. The print then continues on the right where a samurai, foot stomping on the first demon's axe, engages with two other figures. One holds him around the waist, the other is being crushed by his foot. The demon wrapping his arms around the samurai has conventional measles iconography, with his spotted body and messy black hair. This print is done by Yoshiiku, also known as Ochiai, who was a student of Kuniyoshi. At the beginning of his career, he focused on the popular subjects of actors, warriors, and beautiful women, however he began newspaper illustration in the 1870s, and was a co-founder of the Tokyo Illustrated Newspaper, which led to his hiatus in print designing.⁶³

The text accompanying the figures identifies who they are, indicating that they are in fact *Kabuki* actors in character as two *samurai*. The figure on the left garbed in red is the actor Kawarasaki Gonjirou (1838-1903), who is playing the part of Chobei. The figure on the right in blue is identified as Tanosuke Sawamura (1845-1878), playing the part of Gonpachi. In *Kabuki* theater, these two characters meet at the climax of the play, *The Execution Ground at Suzugamori*. The meeting of these figures in a graveyard is indicated by the large monument inscribed with a passage from the Lotus Sutra. The play brings together the two historical figures of Banzuiin Chobei (1622-1657) and Shirai Gonpachi (d.1679) within a fictional story, allying the two together. At the moment of their meeting within the play, Chobei calls out to Gonpachi with his arms crossed, which is what we see occurring in this print. However, the presence of demons like the ones

⁶³ Marks. 158.

pictured within the print, is newly contrived.⁶⁴ It appears as if the artist has taken these two popular *Kabuki* characters and placed them within a fabricated scenario in order to fit the theme of the text that accompanies the print.⁶⁵

With the inclusion of the measles demon attacking the heroic figure Chobei and often romanticized Gonpachi, however, the artist is able to create an informational print that addresses the current concerns of the Edo-period audience. At the time that this print was released, during the measles outbreak in 1862, the actor playing the part of Gonpachi, Sawamura Tanosuke had recently contracted and recovered from measles, which is the subject of another print (Figure 2.10). It is plausible that the artist drew the measles demon attacking the famous actor because Sawamura Tanosuke himself was known to be battling this disease.

Following the convention of depicting measles as a hideous female figure, *Prevention of Measles*, pits three measles demons against a single swordsman. In this image by Ochiai Yoshiiku, three spotted women dressed in torn robes all look to a single samurai, who is poised in a battle-ready stance before a thatched roof home. The samurai sports beautifully patterned clothing and stands out in the compositions compared to the three figures to the right. The uppermost of the three figures looks the most like other depictions of the measles, such as the ones in Figure 2.2, with her robust frame and wild

⁶⁴ James Brandon, Samuel Leiter. *Kabuki Plays on Stage: Darkness and Desire, 1804 - 1864*. University of Hawaii Press (2002); 113-114

⁶⁵ Brandon. 104.

hair. The blue-toned woman crouching at the bottom of the composition holds a paper, with several copies laid on a larger mat in front of her, as she looks towards



Figure 2.5: Ochihai Yoshiiku, *Prevention of Measles*, 1890. Woodblock print, ink and color on paper, 35.9 x 24.3 cm, Ōban Tate-e. Contributing Institution: UC San Francisco, Special Collections.

the warrior. These papers appear to have the unlucky number 4 or (四 *shi*) written on them.

In Japanese, *shi* is also the word for death. Perhaps this demon is handing out these papers with a death sentence written on them.

The fearsome 1862 measles epidemic spread far across the country and afflicted many. This mass-produced and for-purchase image suggests the fear that only a samurai could take on this disease.



Figure 2.6: Utagawa Yoshifuji, *Fine Doctor Kai no Tokuhon lecturing on the History of Measles*, 1862. Woodblock print, ink and color on paper, diptych, 35.8 x 49.3 cm, *Ōban Tate-e*. Contributing Institution: UC San Francisco, Special Collections.

In this image from 1862, a doctor reads to a large crowd of Japanese citizens. The audience features mostly women, with some men and small children. The figures all wear brightly patterned clothing and most of the figures are carrying personal decorated fans, which perhaps indicates the relative wealth of the audience. The doctor is teaching the public about the measles and proper self-care during times of epidemic, with the idea that diet and lifestyle choices could combat disease. For example, sex, bathing, liquor, and foods such as burdock, river fish, leeks and mushrooms were thought to have a negative impact on health during an epidemic, especially in terms of susceptibility to the measles. Healthier food items included sugar, red beans, loquats, and pickled radishes.

In the top left of the image, a deity stands on a cloud, garbed in white, with a golden diadem upon long black hair. This figure also holds a branch, and long sleeves conceal the hands. There were many different deities associated with measles prints, from gods to demon slayers. This particular figure appears to be a Shinto deity, perhaps the measles-preventing deity, Izumo, who is illustrated in *Shinto God from Izumo Province Preventing Measles* (Figure 1.3).⁶⁶ Though not identical, the figures in both prints have significantly similar appearances, notably both have long hair and white attire with recognizably long sleeves.

Especially during the epidemics of the 1860s, health and diet were major themes in Japanese visual culture. Yoshifuji's woodblock print is part of this tradition.

⁶⁶ Smits. 15.



Figure 2.8: Utagawa Yoshimune, *Legends on Lightening Measles Symptoms*, 1862. Woodblock print, ink and color on paper, 35.6 x 25 cm, *Ōban Tate-e*. Publisher: Itoya Shōbei. Contributing Institution: Museum of Fine Arts, William Sturgis Bigelow Collection.

In this image, three figures are pictured, a mother and child with a man and horse. The man, who is depicted with no shoes, appears to be a Shinto priest due to his white clothing and tall black cap. The child has his head covered by a bucket by the Shinto priest, which relates to folk medical practice, which held that placing a wheat bucket atop the head of a child with measles would lessen the severity of a case, or sometimes prevent the illness altogether.⁶⁷ The horse is the sacred white horse of Ise shrine, carrying paper strips.⁶⁸ The text surrounding the figures is encapsulated by the form of a mountain and reads “Don’t forget about the many gods of Mt. Fuji during this time.” This perhaps relates to the Shinto priest who is depicted within the image, implying that the Shinto *kami*, and by extension the priests who attended them, could be of service during a measles outbreak. Mt. Fuji is also associated with the ability to cure pox diseases specifically, which explains why the artist would evoke its visage within a print related to measles.⁶⁹

The text is separated into two sections notated with different symbols (○) and (▲). The circles denote things that would be good for measles treatment and prevention. Daikons, loach fish, carrots, etc. were all things that were popularly believed to help the ill during a measles outbreak. The triangles then indicate activities and foods that would negatively impact one with the measles. This includes sex and using public baths as well

⁶⁷ Smits. 15.

⁶⁸ Allen. 2.

⁶⁹ Allen. 2.

as some types of food such as river fish and burdock root. The image also includes the amount of time that one should avoid these things, from 50 to 75 days.⁷⁰

The practice of using a wheat bucket to prevent disease was part of Japanese verbal magic. In spoken Japanese, the word for measles, *hashika*, sounds the same as the word for grain husks. Therefore, it was hoped that just as the bucket had been emptied of grain husks (*hashika*), so too the person within it could be emptied of their measles (*hashika*). Other representations of Japanese verbal magic found in measles prints include the representation of pears: the Japanese word for pear is *nashi* which is a homophone for ‘no disease’.⁷¹

In this image (2.9) by Utagawa Yoshiiku, the artist depicts different herbs for the treatment of measles being used as weapons against personifications of the measles. Three different natural remedies appear in this image. On the far left, one is pouring small dark orbs, most likely black beans, from a container which are falling upon the figures below. Clockwise to the right, the next figure is posed to strike with a long stalk of wheat raised above his head. Finally, a third figure is pouring a liquid on the two monsters representing disease, as they scramble away in terror. Rather than large hulking figures, these measles demons are depicted as hags, with long dark hair flowing behind them.

⁷⁰ Translated by Clare Kappenman.

⁷¹ Smits. 15.



Figure 2.9: Utagawa Yoshiiku, *Herbs for Treating Measles*, 1862. Woodblock print, ink and color on paper, 36.2 × 24.8 cm, *Ōban Tate-e*. Publisher: Ōmiya Kyūjirō. Contributing Institution: Museum of Fine Arts, William Sturgis Bigelow Collection.

The use of the leaf at the top right of the page is significant, as the use of the holly, or ilex, leaf was a part of Japanese sympathetic magic. It was believed that by

writing a verse invoking the Lord of Wheat on the back of one of these leaves, one could cure their case of the measles or lessen its severity. The Lord of Wheat was called upon because of wheat husks' (*hashika*) association with Japanese verbal magic.⁷²

In the 1862 measles epidemic it was not only the poor that were afflicted. In this image by Utagawa Yoshimune, the *Kabuki* actor Sawamura Tanosuke III is shown after having recovered from the measles. In the image, Sawamura looks poised and calm, most likely during a performance, holding what appears to be a teacup. Sawamura was an *onnagata* actor, an actor who plays female roles, which explains why he is dressed in women's clothing, with the shaved portion of his head covered by a special headscarf called a *murasaki boshi*.⁷³

Fans of this actor would be interested in this print, as it celebrates that their favorite actor had defeated such a fearsome disease. The print also provided, however, an excellent teaching point. The text around the figure describes how to treat the measles, contributing to public health awareness by providing medical information. The artist was able to utilize the actor's connection to the measles in order to gain public interest in the topic of measles prevention.

⁷² Smits. 14-15.

⁷³ A.C. Scott, *The Kabuki Theatre of Japan*. London, Allen & Unwin, 1999. 130.



Figure 2.10: Utagawa Yoshimune, Actor Sawamura Tanosuke III
Recovered Completely: How to Treat Measles, 1862. Woodblock print,
 ink and color on paper, 36.2 x 25.5 cm, Ōban Tate-e. Publisher:
 Shimizuya Naojirō. Contributing Institution: Museum of Fine Arts,
 William Sturgis Bigelow Collection.

This image (2.11), from 1877, shows an army attacking a figure meant to personify cholera. Cholera was another epidemic that spread across Japan during the nineteenth century. This illness spread across the country swiftly through infected water. Cholera causes excessive diarrhea which would last until death. The 1858 outbreak which ran parallel to the measles epidemic was one of the worst cases of cholera in Japanese history.



Figure 2.11: Taiso Yoshitoshi, *Illustrated Narrative on Preventing Cholera*, 1877. Woodblock print, ink and color on paper, diptych, 36.8 x 51.6 cm, *Ōban Tate-e*. Contributing Institution: UC San Francisco, Special Collections.

Returning to the image, the men dressed in modern military garb, these are not the samurai of the Edo period, but rather soldiers of the Meiji period. During the Meiji,

depicting the military was a popular way for artists to illustrate national interest in modernization and industrialization. This print was done by Taiso Yoshitoshi, student of Kuniyoshi, he was known for his depictions of violence and was known to have the nickname “war artist.”⁷⁴ This print exemplifies the artist’s fascination with these violent subjects with its obvious influence from depictions of military force.

In the image, the men’s rifles and cannons have been replaced with bottles containing carbolic acid, which was an antiseptic used to stop the spread of cholera during this time. The men raise their banners and bottles at the frightening figure floating above in an attempt to defeat it. This image seems almost propagandistic, similar to images such as Figure 3.8 (discussed later in this catalogue). The men in this print are all massed together, in the background filed in ranks, and in the front seeming to spring into action, banded together with all of the same uniforms. The use of samurai in art to represent honor and strength was replaced in the Meiji period, when the Japanese national army became the embodiment of strength, a concept depicted within this print. This combination of organization and unity give the idea that perhaps the military heroes of the Meiji period were capable of defeating illness just as well as the samurai of the Edo.

⁷⁴ Marks. 166.

Chapter 3: Medical Practice Illustrated in Japanese Woodblock Prints



Figure 3.1: Anonymous, *Postpartum*, 19th century.
Woodblock print, ink on paper. Contributing Institution:
Yale University, Harvey Cushing/John Hay Whitney
Medical Library.

In this print, titled *Postpartum*, a man examines a woman's stomach. Though the artist is unknown, from the title some information can be gleaned about the content of the image. In 1800s Japan, much of women's health studies were based on a text by Kagawa

Genetsu written in 1765 titled, *Treatise on Obstetrics (San Ron)*. Kagawa trained in mostly Chinese medical practices with some interest in western techniques that had made their way into Japan. In his book, he explains his practice in the field of women's health, from ideas on conception to post birth with accompanying images that visualized concepts discussed within the text.⁷⁵

This image is perhaps part of this tradition of physician's books about childbirth and postpartum. One indication is the gender of the person performing the examination. Midwives were traditionally female, however, the figure in the image has a *chonmage*, the Edo-period male hairstyle, which informs us that he is male and thus not a midwife. The text within the print relates to postpartum dizziness, blindness, and paleness.⁷⁶ These elements suggest that the content of the print describes the actions to take when a patient has postpartum anemia or a similar affliction. The text advises massage as the solution, either open palmed or close fisted, with each method being illustrated.

This print was likely meant to be instructional for postpartum care, perhaps for midwives or other physicians. Midwives mostly dealt with births at this time; however,

⁷⁵ Ilza Veith. "The Beginnings of Modern Japanese Obstetrics." *Bulletin of the History of Medicine* 25, no. 1, 1951. 45.

⁷⁶ Translated by Clare Kappenman.

when a birth was particularly difficult or when something went wrong physicians were consulted as experts of internal medicine.



Figure 3.2: Hamano Teisuke, *Information on Pregnancy*, 1880. Woodblock print, ink and color on paper, diptych, 34.9 x 48.2 cm, *Ōban Tate-e*. Contributing Institution: UC San Francisco, Special Collections.

This print presents information on pregnancy in the format of a diptych. On the right, women display their stomachs, with views of the fetuses developing inside their wombs. Each woman depicts a different month of development, starting at the top right and ending with the woman on the bottom left. In accordance with eastern tradition, there are ten months of pregnancy rather than nine.

On the left, six circles depict the different ways in which a child could possibly be born. These include, “cephalic (head-first) presentation, followed by shoulder presentation (the arm emerges first), multiple birth (twins), and the delivery of a breech baby.”⁷⁷

These images illustrate modern knowledge and practices related to childbirth for public consumption, specifically for a female audience. Interestingly, this image gives colorful and descriptive depictions of both the women’s prenatal anatomy and the types of births. Rather than hiding the women’s bodies behind layers of robes, as seen in Figure 3.3, these pictures give a graphic view of the womb and fetuses within. These types of images give an excellent view on Japanese prenatal practices and show their views on fetal development.

Created by Utagawa Yoshitora, student of Kuniyoshi, this print (3.3) features the subject of childbirth in a specific year. Here, a woman is covered by a quilt on the right of this image. She has just given birth to the child being held by the older woman who is washing it. During the Edo period, the poor relied on women from the family or nearby community for assistance during childbirth, while women of the upper classes could afford the help of midwives.⁷⁸

⁷⁷ Laura Allen. “Women’s Health.” UCSF Japanese Woodblock Print Collection. japanesewoodblockprints.library.ucsf.edu. <http://japanesewoodblockprints.library.ucsf.edu/women1.html> (Accessed June 2019).

⁷⁸ Aya Homei. “Birth Attendants in Meiji Japan: The Rise of a Medical Birth Model and the New Division of Labour.” *Social History of Medicine* 19.3, 2006. 409-410.



Figure 3.3: Utagawa Yoshitora, *Teaching on a Child Born in the Cyclical Year of Hinoe-uma*, 1845. Woodblock print, ink and color on paper, 36.8 x 25.4 cm, *Ōban Tate-e*. Contributing Institution: UC San Francisco, Special Collections.

The abundant textiles and expensive folding screen depicted within this print indicate the woman is rich, and able to hire a midwife to assist in the care of mother and

child. Unlike images such as Figure 3.2, which give in-depth depictions of birth, this print instead takes a less scientific approach to the subject.

As described by the title, this print was not only a depiction of a particular childbirth, but also an instructional resource for birthing children during a certain year of the Chinese astrological chart. *Hinoe-uma*, the 43rd year of the sexagenary cycle, is the year of the fire horse, as indicated by the caricature in the title cartouche.⁷⁹

This print (3.4) depicts the different pressure points related to acupuncture theory. Before the Edo period, practitioners of acupuncture traveled to China to study new techniques and returned to Japan with this knowledge. Due to Japan's isolation beginning in 1635, most of the Japanese practitioners of acupuncture began developing their own techniques.⁸⁰

This print, however, comes from a Japanese translation of a Chinese text called the *Shi Si Jing Fa Hui*, which was translated into Japanese and printed on several

⁷⁹ In my research on this Hino-e Uma Year, I found that it was considered unlucky, with decreased birthrates and increased abortion rates, as the superstition was that those born in this year would have a bad personality. For more information on this superstition, see:

Hira, Kenji, Tsuguya Fukui, Akira Endoh, Mahbubur Rahman, and Munetaka Maekawa. "Influence of Superstition on the Date of Hospital Discharge and Medical Cost in Japan: Retrospective and Descriptive Study." *BMJ: British Medical Journal* 317, no. 7174 (1998): 1680-683.

⁸⁰ Kobayashi *et al.* 361.

occasions.⁸¹ The author of this text was Hua Sho, a Chinese physician who published books on concepts relating to Chinese medicine and acupuncture specifically.⁸²

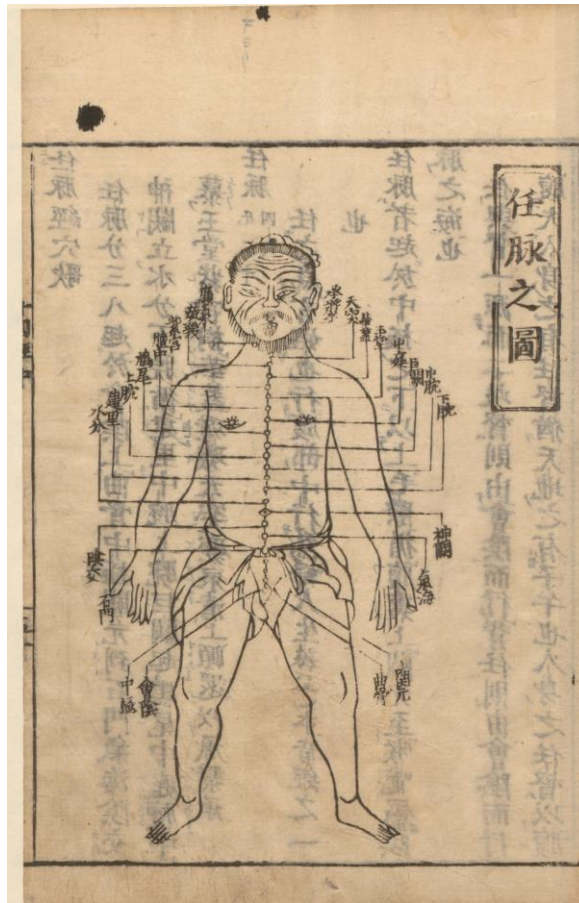


Figure 3.4: Hua Shou, Image from *Jūshikei Hakki* or *Expression of the Fourteen Meridians*. Woodblock print, ink on paper. Publisher: Suharaya Heisuke 1716. Contributing Institution: National Library of Medicine.

⁸¹ U.S. National Library of Medicine. "Suo, Hua. *Jushikei Hakki*." Historical Anatomies on the Web. Nlm.nih.gov (Accessed June 2019; Updated August 2016). https://www.nlm.nih.gov/exhibition/historicalanatomies/hua_bio.html.

⁸² U.S. National Library of Medicine. "Suo, Hua. *Jushikei Hakki*."

This image depicts a human figure with acupuncture and meridian point locations and their different characteristics illustrated and described. The title of the book from which this print comes, indicates that this print is related to the 14 meridians, which is a concept in TCM acupuncture that connects the different points of the body through the circulation of *qi*.

Acupuncture as a practice, though popular during the Edo, had opponents during the Meiji period. As part governmental desire for ‘modernization’ traditional Japanese culture was rejected in favor of perceived modern culture. Western medicine became the governmentally accepted medical practice and traditional practices were abandoned.⁸³

A later work done by the artist Yoshitoshi, in this (3.5) woodblock print a woman is seen with her back on display for the viewer. Her head leaning down, she peers at the viewer. Though this print may be considered erotic, it also depicts moxibustion, a medical practice popular in the Edo period. In a time of mass epidemics of diseases such as cholera and measles, moxibustion became a reassuring medical procedure. In the practice of moxibustion, one applies burning herbs to acupuncture points to treat symptoms of inflammation and pain in specific parts of the body. Though related to acupuncture, moxibustion was also practiced by lay people.

⁸³ Kiyobashi *et al.* 363.



Figure 3.5: Taiso Yoshitoshi, *32 Aspects of Customs: Something Hot*, 1888. Woodblock print, ink and color on paper, 36.9 x 25.3 cm, *Ōban Tate-e*. Contributing Institution: UC San Francisco, Special Collections.

The common people traveled to Buddhist temples, Shinto shrines, and hot springs to receive moxibustion treatments, or in some cases performed treatment on themselves.⁸⁴

⁸⁴ Anu King Dudley. "Moxa in Nineteenth-century Medical Practice." *Journal of the History of Medicine and Allied Sciences* 65, no. 2 (2010): 187-206.

This image depicts moxibustion being performed on the back of the woman, as four dark spots, one with a small wisp of smoke as the herbs burn. Images such as this one are often not meant to be instructional, such as prints depicting acupuncture points (Figure 3.4). Rather, moxibustion was such a common practice that popular prints often featured it as an activity, especially when accompanying images of beautiful women. Interestingly, this print is done by the prolific artist, Taiso Yoshitoshi who, rather than beautiful women, is known for his depictions of war and conflict.⁸⁵

Within her private quarters, a woman sits with her beautifully patterned kimono cascading around her, she looks down, holding her foot in her hands. Behind her is a cosmetics chest with a mirror, its drawers open. To her side there is a small tray and in front is a container with burning herbs and a stick of incense. Though this image (3.6) is a part of the *bijin-ga* (“beautiful woman paintings”) tradition, it also illustrates the woman performing moxibustion on her foot.

Not necessarily needing to be performed by medical professionals, the practice of moxibustion could be done with a simple understanding of acupuncture. As seen in the previous image, once it became a widespread practice amongst the common people during the Edo period moxibustion began to appear within popular prints.

⁸⁵ Marks. 166.



Figure 3.6: Utagawa Kunisada I (Toyokuni III), *Woman Treating Her Foot with Moxibustion*, from the series *Spring Dawn: A Contest of Beauties*, 1820s. Woodblock print, ink and color on paper, 37.8 x 26.1 cm, *Ōban Tate-e*. Publisher: Iseya Rihei. Contributing Institution: Museum of Fine Arts, William Sturgis Bigelow Collection.

Though this image features conventional subject and style, some of its elements are quite modern. For example, the reflection of the woman's hair, which highlights each strand, gives a sense of the late Edo's newfound interest in a scientific gaze with attention to realistic detail and precision. This interest is continued with the artist's use of linear perspective. Though still somewhat flattened, this depiction exhibits the artist's interest in new techniques, such as the portrayal of the recession of space. This concept is shown in the illustration of the cosmetics chest, as the lines convincingly recede into space which makes the depiction seem more realistic.⁸⁶



Figure 3.7: Utagawa Kuniyoshi, *Hua Tuo Treats Guan Yu's Arrow Wound by Scraping Bone*, 1853. Woodblock print, ink and color on paper, triptych, 35.6 x 71.5 cm, Ōban Tate-e. Contributing Institution: UC San Francisco, Special Collections.

⁸⁶ For more information on the introduction of western techniques such as linear perspective, see, Stephen Little. "The Lure of the West: European Elements in the Art of the Floating World." *Art Institute of Chicago Museum Studies* 22, no. 1 (1996): 75-96, and, Morris Low, "The Impact of Western Science and Technology on 'Ukiyo-e' Prints and Book Illustrations in Late Eighteenth and Nineteenth Century Japan." *Historia Scientiarum: International Journal Of The History Of Science Society Of Japan* 21, no. 1 (2011): 66-87

The artist of this print, Utagawa Kuniyoshi, was one of the most well-known of the Edo period *ukiyo-e* artists. Less successful than his counterparts with actor prints, Kuniyoshi instead was quite well known for his depictions of historical figures and warriors.⁸⁷ He not only produced an enormous amount of woodblock prints, but also illustrated books and was quite interested in western art techniques.⁸⁸

The main figure in the center panel of this triptych is Guan Yu (d. 220), a famous Eastern Han (25-220 AD) general who is depicted here with deep russet skin and long black beard. The man performing a surgical procedure on Guan Yu's arm is the legendary Hua Tuo (108-208 AD), who is considered China's first surgeon. Kuniyoshi makes the roles of the figures easily identifiable through their physiques. A wizened Hua Tuo treats the hefty Guan Yu, correlating to their knowledge and strength respectively. The print is brightly colored, with its saturated blue background and multicolored robes. In each of the three sections, enormous flowers litter the background, adding to the mythical feel of the image.

This particular image depicts this romanticized fictional account in which the General Guan Yu, after being hit by a poisoned arrow, plays chess while being operated on by the doctor without anesthetics. Hua Tuo was said to have made great developments in the field of medicine by developing aspects of acupuncture and, more significantly, anesthesia and organ transplants. He was the first surgeon from China to have operated

⁸⁷ Marks 140.

⁸⁸ For more information on Kuniyoshi and his interest in western art, which is transmitted from Kuniyoshi to his student Kawanabe Kyosai, see, Brenda Jordan and Victoria Louise Weston. *Copying the Master and Stealing His Secrets : Talent and Training in Japanese Painting*. Honolulu: University of Hawaii Press, 2003.

on the abdomen.⁸⁹ Hua Tuo's fame ultimately led to his downfall, as he was executed for refusing to serve the warlord, Cao Cao.

Hua Tuo made many strides within medicine, however, he was a practiced herbalist and acupuncturist and believed that each of these different medical treatments had a place within the field of medicine. His impact within Chinese history was so significant that he is a medicinal immortal within the Daoist pantheon, and acupuncture points continued to be named after him even posthumously.⁹⁰



Figure 3.8: Gakyōjin, *The Humane Great Japanese Red Cross Medical Corps Tending to the Injured in the Russo-Japanese War*, 1904. Woodblock print, ink and color on paper, triptych, 35.2 x 60.9 cm, *Ōban Tate-e*. Publisher: Naraha Sannosuke. Contributing Institution: Princeton University, Allen R. Adler, Japanese Print Collection.

⁸⁹ Tubbs, R. Shane & Riech, Sheryl & Verma, Ketan & Chern, Joshua & Mortazavi, Martin & Cohen-Gadol, Aaron. (2011). "China's first surgeon: Hua Tuo (c. 108-208 AD)." *Child's nervous system: ChNS : Official Journal of the International Society for Pediatric Neurosurgery*. 27. 1357-60.

⁹⁰ Tubbs *et al.* "China's First Surgeon." 1360.

During the first Sino-Japanese war of 1894, Japanese print artists began working on a style of print that would visualize the national spirit of the Japanese during times of conflict. These prints, known as *senso-ē*, or “war pictures”, often romanticized depictions of war, where the Japanese military would appear as the heroes, dignified and modern.⁹¹ Depictions of the militaries of the Russo-Japanese war, were often made drawing similarities between the two countries. Rather than the demeaning ways in which the Chinese were represented in pictures of the Sino-Japanese war, the Russians were depicted identically to the Japanese, with similar airs of dignity, and their hairstyles being the only recognizable difference between the two.⁹²

In this image, an injured man is being carried by two Japanese soldiers. He wears a blue uniform and sports a large moustache, which identifies the figure as Russian rather than Japanese. Placed at the center of the image, this Russian soldier is made the focal point of the triptych. Stylistically, this print diverges from classic Edo-period works that feature two-dimensional figures with more stylized facial features. This image instead shows these military men in a more realistic style which varies drastically from the traditional *Ukiyo-e* styles. The adoption of western medical culture is also depicted as the men are united under the flag of the Red Cross, a symbol that was universally used by the

⁸² Donald Keene. “The Sino-Japanese War of 1894-95 and Its Cultural Effects in Japan.” In *Tradition and Modernization in Japanese Culture*, 121-76. Princeton University Press, 1971. 137-138.

⁹² Keene. 138.

humanitarian organization that aids those injured in war.⁹³ Perhaps the artist intended to show not only the strength but also the compassion of the modern, civilized Japanese army, and by extension, the nation of Japan

⁹³ The Editors of Encyclopaedia Britannica. "Red Cross and Red Crescent." Encyclopædia Britannica. May 26, 2017. Accessed June 14, 2019. <https://www.britannica.com/topic/Red-Cross-and-Red-Crescent>.

Bibliography

- Allen, Laura. "Contagious Disease." UCSF Japanese Woodblock Print Collection. [Japanese woodblockprints.library.ucsf.edu](http://japanesewoodblockprints.library.ucsf.edu).
<http://japanesewoodblockprints.library.ucsf.edu/contag1.html> (Accessed June 2019).
- Allen, Laura. "Women's Health." UCSF Japanese Woodblock Print Collection. [Japanese woodblockprints.library.ucsf.edu](http://japanesewoodblockprints.library.ucsf.edu).
<http://japanesewoodblockprints.library.ucsf.edu/women1.html> (Accessed June 2019).
- Amsden, Dora, and Woldemar von Seidlitz. *Ukiyo-E*. [New York, N.Y.]: [Parkstone International], 2009.
- Bowie, Theodore. "A Note on the Skeleton in Japanese Art." *Art Journal* 21, no. 1 (1961): 16-18.
- Brandon James, Leiter Samuel. *Kabuki Plays on Stage: Darkness and Desire, 1804 - 1864*. University of Hawaii Press (2002); 113-114.
- Brown, Kendall H, and Hollis Goodall-Cristante. *Shin-hanga: New Prints in Modern Japan*. Los Angeles: Los Angeles County Museum of Art, 1996.
- Bushwell, Robert E; Lopez, Donald S. *The Princeton Dictionary of Buddhism*. Princeton University Press, 2014.
- Calza, Gian Carlo. *Ukiyo-e*. London: Phaidon, 2005.
- Charles Leslie and Allan Young. "Between Mind and Eye: Japanese Anatomy in the Eighteenth Century." In *Paths to Asian Medical Knowledge*, Berkeley: University of California Press, 1992. 21-43.

Ciriacono, Salvatore. "Scientific Transfer between Europe and Japan. The Influence of Dutch and German Medicine from the Edo Period to the Meiji Restoration." *Comparativ: Leipziger Beiträge Zur Universalgeschichte Und Vergleichenden Gesellschaftsforschung* 20, no. 6 (2010): 134-153.

Cunningham, Andrew. *The Anatomist Anatomis'd: an Experimental Discipline in Enlightenment Europe*. Farnham, Surrey, England: Ashgate. 2010.

Darlington, Anne, *The Teaching of Anatomy and the Royal Academy of Arts 1768-1782*, *Journal of Art& Design Education* Vol 5, No. 3, 1986.

Davis, Julie Nelson. *Partners in Print : Artistic Collaboration and the Ukiyo-e Market*. UPCC Book Collections on Project MUSE. Honolulu: University of Hawaii Press, 2015.

Dudley, Anu King. "Moxa in Nineteenth-century Medical Practice." *Journal of the History of Medicine and Allied Sciences* 65, no. 2 (2010): 187-206.

Foxwell, Chelsea. "'Merciful Mother Kannon' and Its Audiences." *The Art Bulletin* 92, no. 4 (December 2010): 326-47.

Hira, Kenji, Tsuguya Fukui, Akira Endoh, Mahbubur Rahman, and Munetaka Maekawa. "Influence of Superstition on the Date of Hospital Discharge and Medical Cost in Japan: Retrospective and Descriptive Study." *BMJ: British Medical Journal* 317, no. 7174 (1998): 1680-683.

Homei, Aya. "Birth Attendants in Meiji Japan: The Rise of a Medical Birth Model and the New Division of Labour." *Social History of Medicine* 19.3 (2006): 409-410.

Jannetta, Ann Bowman. *Epidemics and Mortality in Early Modern Japan*. Princeton University Press, 1987.

Johnson, Hiroko. *Western Influences on Japanese Art: The Akita Ranga Art School and Foreign Books*. Amsterdam: Hotei Publishing, 2005.

- Jordan, Brenda G., and Victoria Louise Weston. *Copying the Master and Stealing His Secrets: Talent and Training in Japanese Painting*. Honolulu: University of Hawaii Press, 2003.
- Keene, Donald, Louise Erica Virgin, Anne Nishimura Morse, and Frederic A. Sharf. *Japan at the Dawn of the Modern Age: Woodblock Prints from the Meiji Era, 1868-1912*, Boston, Mass: Museum of Fine Arts, Boston. 2001.
- Keene, Donald. "The Sino-Japanese War of 1894-95 and Its Cultural Effects in Japan." In *Tradition and Modernization in Japanese Culture*, 121-76. Princeton University Press, 1971. 137-138.
- Kikuchi, Sadao, and Don Kenny. *A Treasury of Japanese Wood Block Prints (Ukiyo-e)*. New York: Crown Publishers, 1969.
- Kita, Sandy. *The Floating World of Ukiyo-e: Shadows, Dreams, and Substance*. New York: Abrams in association with the Library of Congress. 2001.
- Kobayashi A, Uefuji M, and Yasumo W. "History and Progress of Japanese Acupuncture." *Evidence-Based Complementary & Alternative Medicine (ECAM)* 7 (3) (2010): 359–65.
- Little, Stephen. "The Lure of the West: European Elements in the Art of the Floating World." *Art Institute of Chicago Museum Studies* 22, no. 1 (1996): 75-96.
- Low, Morris. "The Impact of Western Science and Technology on 'Ukiyo-e' Prints and Book Illustrations in Late Eighteenth and Nineteenth Century Japan." *Historia Scientiarum: International Journal Of The History Of Science Society Of Japan* 21, no. 1 (2011): 66–87.
- Low, Morris. "Medical Representations of the Body in Japan: Gender, Class, and Discourse in the Eighteenth Century" *Annals of Science* 53:4, 1996.
- Marks, Andreas. *Japanese Woodblock Prints: Artists, Publishers, and Masterworks 1680-1900*. Tokyo: Tuttle Pub. 2010.

- Mason, Richard and. Caiger, J.G. *A History of Japan*. Tokyo: Tuttle Pub. 1997.
- Matsunosuke, Nishiyama, and Gerald Groemer. "Edo Publishing and Ukiyo-e." In *Edo Culture: Daily Life and Diversions in Urban Japan, 1600-1868*, 64-75. University of Hawai'i Press, 1997.
- Meech, Julia, and Christine Guth. *The Matsukata Collection of Ukiyo-E Prints: Masterpieces from the Tokyo National Museum*. New Brunswick, N.J.: Jane Voorhees Zimmerli Art Museum, Rutgers, the State University of New Jersey, 1988.
- Meech, Julia. *The World of the Meiji Print: Impressions of a New Civilization*. New York: Weatherhill, 1986.
- Mestler, Gordon. "A Galaxy of Old Japanese Medical Books with Miscellaneous Notes on Early Medicine in Japan Part I. Medical History and Biography. General Works. Anatomy. Physiology and Pharmacology," *Bulletin of the Medical Library Association* Vol 42-3, 1954. 312.
- Merritt, Helen. *Modern Japanese Woodblock Prints: the Early Years*. Honolulu: University of Hawaii Press. 1990.
- Neuer, Roni, Herbert Liberson, and Susugu Yoshida. *Ukiyo-e: 250 Years of Japanese Art*. New York: Gallery Books, 1979.
- Newland, Amy Reigle, and Chris Uhlenbeck. *Ukiyo-e to Shin Hanga: the Art of Japanese Woodblock Prints*. [New York]: Mallard Press. 1990.
- Percival, Robert. *Ukiyo-e: Art for the People*. Saint John, N.B.: New Brunswick Museum. 1978.
- Salter, Rebecca. *Japanese Woodblock Printing*. Honolulu: University of Hawai'i Press, 2002.
- Scott, A.C. *The Kabuki Theatre of Japan*. London, Allen & Unwin, 1999.

Screech, Timon. "The Birth of the Anatomical Body." In N. Rousmaniere, ed., *Births and Rebirths in Japanese Art*. Hotei Press: Leiden (2001), pp. 83-140.

Screech, Timon. *The Lens within the Heart: The Western Scientific Gaze and Popular Imagery in Later Edo Japan*. Honolulu: University of Hawaii Press 1997.

Shirasugi, Etsuo. "Envisioning the inner body during the Edo period in Japan: Inshoku yojo kagami (Rules of Dietary Life) and Boji yojo kagami (Rules of Sexual Life)." *Anatomical Science International* 82, no. 1 (March 2007): 46-52.

Smith, Henry D., Kiyochika Kobayashi, and Susan Tai. *Kiyochika, Artist of Meiji Japan*. [Santa Barbara, CA]: Santa Barbara Museum of Art, 1988.

Smits, Gregory. "Warding off Calamity in Japan: A Comparison of the 1855 Catfish Prints and the 1862 Measles Prints." *East Asian Science, Technology, and Medicine*, no. 30 (2009): 13,16.

Suntory Museum of Art, *Seven Daring Years: Odano Naotake and Akita Ranga*. (November 2016), Exhibition Catalogue, Accessed June 2019, https://www.suntory.com/sma/exhibition/2016_5/display.html.

Thompson, Sarah. "The World of Japanese Prints." *Philadelphia Museum of Art Bulletin* 82, no. 349/350 (1986): 1-47. <http://www.jstor.org/stable/3795440>.

Tubbs, Shane, Marios Loukas, David Kato, Mohammad R. Ardalan, Mohammadali M. Shoja, and Aaron A. Cohen Gadol. "The Evolution of the Study of Anatomy in Japan." *Clinical Anatomy* 22, Issue 4 (May 2009): 425-435.

Tubbs, Shane, Riech Sheryl, Verma Ketan, Chern Joshua, Mortazavi Martin, Cohen-Gadol Aaron. "China's first surgeon: Hua Tuo (c. 108-208 AD)." *Child's nervous system: ChNS : official journal of the International Society for Pediatric Neurosurgery*. 27.(211): 1357-1360.

Van Sant, John E. "Rangaku Medicine and 'Foreign' Knowledge in Late Tokugawa Japan." *Southeast Review of Asian Studies* 34 (November): (2012): 207-14.

Veith, Ilza. "The Beginnings of Modern Japanese Obstetrics." *Bulletin of the History of Medicine* 25, no. 1, 1951. 45.

von Seidlitz, Woldemar, and Amsden, Dora. *Impressions of Ukiyo-e*. New York: Parkstone International, 2016.

Willmann, Anna. "Yamato-e Painting," Heilbrunn Timeline of Art History. The Metropolitan Museum of Art. Metmuseum.org.
https://www.metmuseum.org/toah/hd/yama/hd_yama.htm (accessed June 2019).

Yu, F, T Takahashi, J Moriya, K Kawaura, J Yamakawa, K Kusaka, T Itoh, S Morimoto, N Yamaguchi, and T Kanda. "Traditional Chinese Medicine and Kampo: A Review from the Distant Past for the Future." *Journal of International Medical Research* 34, no. 3 (May 2006): 231–39.

The Editors of Encyclopaedia Britannica. "Red Cross and Red Crescent." Encyclopædia Britannica. May 26, 2017. Accessed June 14, 2019.
<https://www.britannica.com/topic/Red-Cross-and-Red-Crescent>.